

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2004/000189

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C02F 3/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 B01D, C02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Korean Patents and applications for inventions since 1975
 Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 eKIPASS, DELPHION, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5395427 A (Air Products and Chemicals, Inc.) 7 March 1995 See the whole document	1-4
A	KR 1998-0019534 A (Kim, Hak Ro) 5 June 1998 See the whole document	2-4
A	US 4190424 A (BOC Limited) 26 February 1980 See the whole document	1-4
A	JP 02-026609 A (Kobe Steel Ltd.) 29 January 1990 See the whole document	1-4

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

31 MAY 2004 (31.05.2004)

Date of mailing of the international search report

31-MAY 2004 (31.05.2004)

Name and mailing address of the ISA/KR



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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5395427 A	07-03-1995	NONE	
KR 1998-19534 A	05-06-1998	NONE	
US 4190424 A	26-02-1980	ZA 7806994 A NZ 0181476 A JP 54132476 A2 GB 2011272 A FR 2413116 A2 ES 0449884 A1 DE 2855626 A1 BR 7808535 A AU 4284278 A1	30-07-1980 28-03-1979 15-10-1979 11-07-1979 27-07-1979 01-12-1977 05-07-1979 28-08-1979 05-07-1979
JP 02-026609 A	29-01-1990	NONE	